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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/282,633	03/31/1999	CHRISTIAN LITA	AT9-99-088	8871

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EXAMINER

MOORTHY, ARAVIND K

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 02/18/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/282,633

Applicant(s)

LITA ET AL.

Examiner

Aravind K Moorthy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-5 and 10-25 is/are allowed.
- 6) ☒ Claim(s) 1 and 6-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. Claims 1-25 are pending in the application.
2. Claims 1 and 6-9 have been rejected.
3. Claims 2-5 and 10-25 have been allowed.

Response to Arguments

4. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vu U.S. Patent No. 5,623,601 in view of Raivisto U.S. Patent No. 6,081,601.

As per claim 1, Vu discloses establishing a first secure connection between the client and the proxy (i.e. gateway station 14). Vu discloses that upon verifying the first secure session, establishing a second secure session between the client and the proxy, the second secure session requesting the proxy to act as a conduit to the server [column 8 lines 54-64].

Vu does not teach having the client and the server negotiate a session master secret and delivering the session master secret to the proxy using the first secure session to enable the proxy to participate in the secure communication [column 4 line 54 to column 5 line 14].

Raivisto teaches a client and a server negotiate a session master secret and delivering the session master secret to the proxy using the first secure session to enable the proxy to participate in the secure communication.

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Vu so that a first secure connection would have been made between a client and a proxy. A second connection would have been made between a client and a proxy that enables the proxy to act as a conduit to the server. Secret keys would have been established the proxy and the client and the proxy and the server.

It would have been obvious so to a person having ordinary skill in the art at the time the invention was made to have modified Vu by the teaching of Raivisto because the management of keys and other parameters needed for connection security is simple and secure. When applying this method, only a few security parameters need to be stored at mobile terminals. Another advantage of the method according to the invention is that mobile terminals using incompatible security algorithms and/or security layer protocols can communicate with each other with the connection security provided [column 3, lines 50-61].

As to claim 6, Vu teaches that the first and second secure sessions conform to a network security protocol.

As to claim 7, Vu as modified teaches that the network security protocol is SSL [column 1, lines 42-50].

As to claim 8, Vu as modified suggests that the network security protocol is TLS [column 1, lines 42-50].

As to claim 9, Vu as modified teaches that the server is a Web server and the client is a pervasive computing client [column 4, lines 38-45].

Double Patenting

6. Claims 1, 6-10, 17, 18 and 20-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6-10, 17, 18 and 20-25 of U.S. Patent No. 6,584,567 (hereinafter Bellwood). Although the conflicting claims are not identical, they are not patentably distinct from each other.

As to claim 1, Bellwood discloses establishing a first secure session between the client and the proxy. Bellwood discloses that upon verifying the first secure session, establishing a second secure session between the client and the proxy, the second secure session requesting the proxy to act as a conduit to the server. Bellwood discloses having the client and the server negotiate a session master secret and delivering the session master secret to the proxy using the first secure session to enable the proxy to participate in the secure communication [column 9 line 51 to column 10 line 3].

As to claim 6, Bellwood discloses that the first and second secure sessions confirm to a network security protocol [column 10, lines 16-18].

As to claim 7, Bellwood discloses that the network security protocol is SSL [column 10, lines 19-20].

As to claim 8, Bellwood discloses that the network security protocol is TLS [column 10, lines 21-22].

As to claim 9, Bellwood discloses that the server is a Web server and the client is a pervasive computing client [column 10, lines 23-25].

As to claim 10, Bellwood discloses having the client request a first secure connection to the proxy. Bellwood discloses upon authenticating validity of a certificate received from the proxy, having the client request a second secure connection to proxy. Bellwood discloses that the second secure connection requests the proxy to act as a conduit to the server. Bellwood discloses having the proxy generate a session identifier. Bellwood discloses having the client and the server negotiate a session master secret through the conduit. Bellwood discloses upon completion of the negotiation, having the client deliver the session master secret to the proxy using the first secure connection. Bellwood discloses having the proxy use the session master secret and the session identifier to generate given cryptographic information that is useful for participating in the secure communication [column 10, lines 26-45].

As to claim 17, Bellwood discloses through a proxy, conducting a security handshake procedure between the client and the server to produce a session key. Bellwood discloses transmitting the session key to the proxy so that the proxy can participate in communications between the client and the server during the session [column 11, lines 26-42].

As to claim 18, Bellwood discloses that the session key is transmitted from the client to the proxy over a secure connection [column 11, lines 43-45].

As to claim 20, Bellwood discloses a client. Bellwood discloses a server. Bellwood discloses a proxy. Bellwood discloses a network protocol service for enabling the client and server to communicate over a secure connection. Bellwood discloses a computer program product in a computer readable medium (i) for controlling the client to request a first secure connection to the proxy, (ii) responsive to authenticating validity of a certificate from the proxy, for controlling the client to request a second secure connection to proxy, the second secure

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connection requesting the proxy to act as a conduit to the server, (iii) for controlling the client to negotiate with the server through the conduit to obtain a session master secret; and (iv) upon successful completion of the negotiation, for controlling the client to deliver the session master secret to the proxy using the first secure connection. Bellwood discloses a computer program product in a computer readable medium (i) for controlling the proxy to use the session master secret and a session identifier to generate given cryptographic information, and (ii) for having the proxy modify content in communications between the client and the server [column 11 line 49 to column 12 line 7].

As to claim 21, Bellwood discloses that the proxy includes means for providing transcoding services on behalf of the client [column 12, lines 8-10].

As to claim 22, Bellwood discloses that the proxy includes means for providing encryption/decryption services on behalf of the client [column 12, lines 11-13].

As to claim 23, Bellwood discloses that the proxy includes means for providing caching services on behalf of the client [column 12, lines 14-16].

As to claim 24, Bellwood discloses that the proxy includes means for providing monitoring services on behalf of the client [column 12, lines 17-19].

As to claim 25, Bellwood discloses a first routine (i) for controlling the client to request a first secure connection to the proxy, (ii) responsive to authenticating validity of a certificate from the proxy, for controlling the client to request a second secure connection to proxy, the second secure connection requesting the proxy to act as a conduit to the server, (iii) for controlling the client to negotiate with the server through the conduit to obtain a session master; and (iv) upon successful completion of the negotiation, for controlling the client to deliver the session master

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secret to the proxy using the first secure connection. Bellwood discloses a second routine (i) for controlling the proxy to use the session master secret and a session identifier to generate given cryptographic information, and (ii) for having the proxy modify content in communications between the client and the server [column 12, lines 20-42].

Allowable Subject Matter

7. Claims 2-5 and 10-25 are allowed.

As to claims 2, 10, 17, 20 and 25, prior art does not disclose the proxy using the session master secret and the session identifier to generate given cryptographic information that is useful for participating in the secure communication.

As to claim 17, prior art does not disclose conducting a security handshake procedure between the client and the server to produce a session key and transmitting the session key to the proxy so that the proxy can participate in communications between the client and the server during the session.

Any claims not addressed are allowed on the virtue of dependency.

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Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aravind K Moorthy whose telephone number is 703-305-1373. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aravind K Moorthy
February 6, 2004


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
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